

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P732500

Luminaire Tested: **14FCZ2-20-S-B2750-W2D-CP187-5000K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P275670)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-20-S-B2750-W2D-CP187-5000K  
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT  
AND SMOOTH LENS, WITH, CP187 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

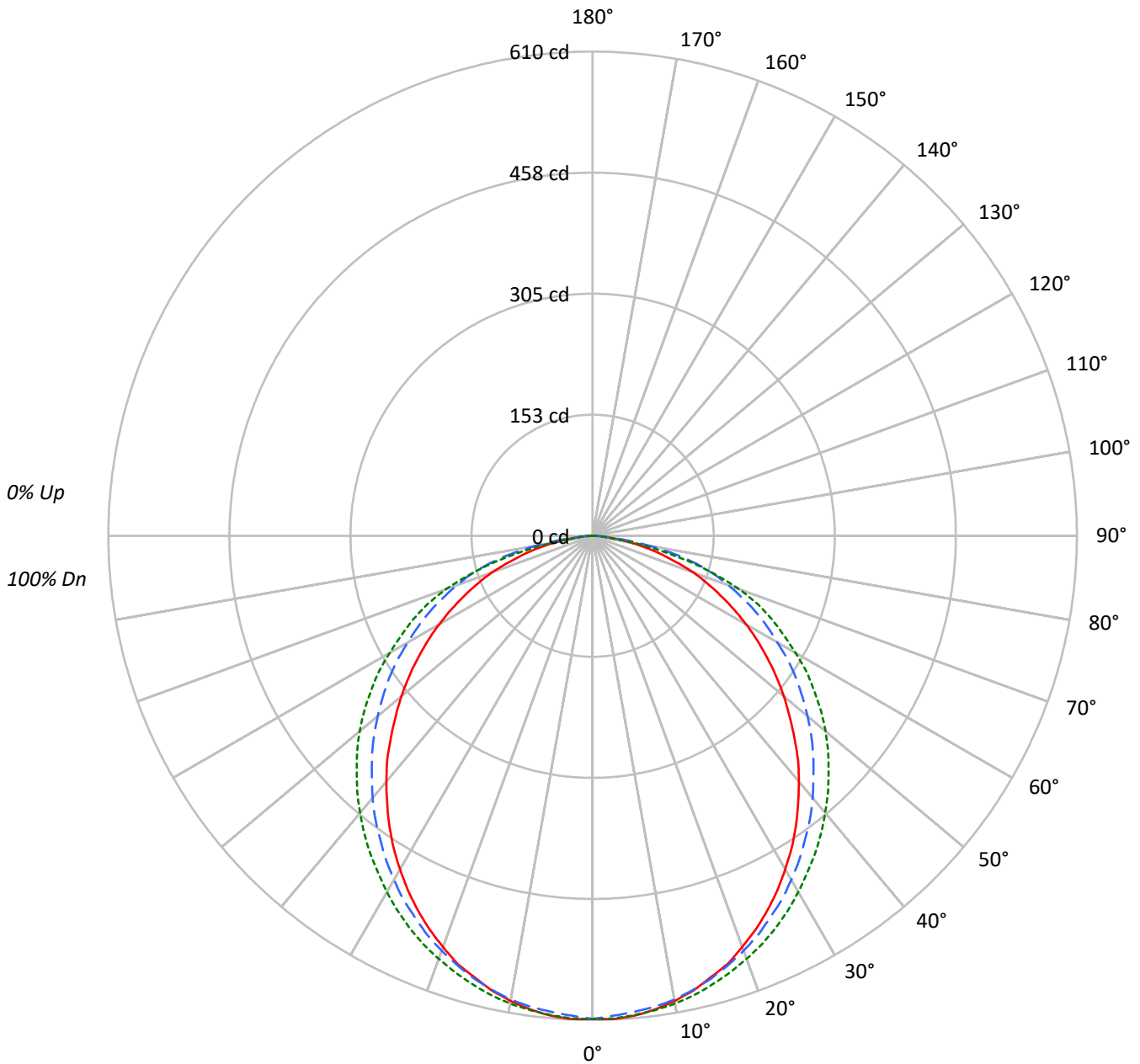
Lumens per Lamp: N/A  
Luminaire Lumens: 1705.0 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 16  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84																			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70																			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58																			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50																			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43																			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38																			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33																			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30																			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27																			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1718	1718	1718
5°	1720	1705	1717
10°	1706	1701	1715
15°	1682	1687	1709
20°	1656	1671	1704
25°	1622	1651	1698
30°	1581	1631	1689
35°	1538	1608	1684
40°	1489	1588	1679
45°	1434	1569	1677
50°	1381	1551	1682
55°	1323	1539	1677
60°	1260	1517	1665
65°	1186	1513	1666
70°	1117	1500	1618
75°	968	1467	1383
80°	783	1182	922
85°	521	408	275



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	3.4
10°-20°	163.5	9.6
20°-30°	245.3	14.4
30°-40°	292.7	17.2
40°-50°	302.5	17.7
50°-60°	276.2	16.2
60°-70°	217.4	12.7
70°-80°	126.5	7.4
80°-90°	23.3	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	466.3	27.4
0°-40°	759.0	44.5
0°-60°	1337.8	78.5
0°-90°	1705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1705.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	609	609	609	609	609	
5°	607	605	602	607	606	58
15°	576	577	577	585	585	162
25°	521	523	530	543	545	240
35°	446	452	467	484	489	279
45°	359	371	393	415	420	277
55°	269	283	313	336	341	240
65°	178	196	226	244	249	176
75°	89	110	134	132	127	94
85°	16	23	13	10	8	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	608.7	608.7	608.7	608.7	608.7
2.5°	609.5	607.8	605.2	609.5	608.7
5°	607.0	605.2	601.9	607.0	606.1
7.5°	601.9	600.2	598.5	603.6	602.8
10°	595.1	594.3	593.4	599.3	598.5
12.5°	586.7	586.7	585.9	592.6	592.6
15°	575.7	576.6	577.4	584.9	584.9
17.5°	565.6	564.7	567.2	575.7	576.6
20°	551.2	552.8	556.2	566.4	567.2
22.5°	536.8	538.5	544.4	554.6	557.1
25°	520.7	523.3	530.0	542.7	545.3
27.5°	503.8	507.3	516.5	530.0	532.5
30°	485.2	490.3	500.4	515.6	518.2
32.5°	466.6	471.7	484.4	499.6	503.0
35°	446.3	452.2	466.6	484.4	488.6
37.5°	425.2	432.8	449.8	467.5	472.6
40°	404.1	412.6	431.1	449.8	455.7
42.5°	383.0	391.4	411.6	432.8	438.8
45°	359.2	371.1	393.1	415.1	420.1
47.5°	336.4	349.2	373.6	395.6	402.4
50°	314.5	327.1	353.3	376.2	383.0
52.5°	291.7	305.2	333.0	356.7	362.6
55°	268.8	283.2	312.8	335.6	340.7
57.5°	246.0	261.2	291.7	313.7	319.6
60°	223.2	239.3	268.8	290.8	295.0
62.5°	200.3	217.2	247.7	267.1	271.4
65°	177.5	196.1	226.5	244.4	249.4
67.5°	155.6	174.1	203.8	220.6	224.9
70°	135.3	152.2	181.8	194.4	196.1
72.5°	109.9	131.0	159.7	166.6	162.3
75°	88.8	109.9	134.5	131.9	126.8
77.5°	67.6	88.8	104.8	96.3	89.6
80°	48.2	69.3	72.7	60.0	56.7
82.5°	31.3	48.2	40.6	31.3	25.4
85°	16.1	22.8	12.6	10.2	8.5
87.5°	5.1	3.4	1.7	1.7	0.8
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)